IAW equipment tech manuals and MPC's.

- REFERENCES: AN/SQN-18 technical manual Equipment MPC's 42411/ABAA-AAAF NAVSEA SE000-00-EIM-030 (EIMB Sonar Handbook)
- TPO 8.07 Given a AN/SQN-18X depth sounder system, test equipment, and tools, VERIFY that the system is ready for installation.
- EO 8.07.01 TEST the depth sounding set.
- EO 8.07.02 MEASURE the primary power supply voltage.
- EO 8.07.03 MEASURE the depth indicator calibration.
- EO 8.07.05 MEASURE the depth indicator sensitivity.
- EO 8.07.06 MEASURE the depth indicator frequency.
- EO 8.07.07 MEASURE the depth indicator pulse width.
- EO 8.07.08 MEASURE the time varied gain (TVG).
- EO 8.07.09 MEASURE the transmitter power output.
- EO 8.07.10 TEST the transducer leakage resistance.
- EO 8.07.11 MEASURE the transducer frequency.
- EO 8.07.12 INSPECT the indicator assembly.
- TPO 8.09 Given electronic equipment and cleaning materials, CLEAN equipment in accordance with equipment technical manuals and MPC's.
- EO 8.09.01 PREPARE equipment for cleaning.
- EO 8.09.02 SELECT the proper materials for given cleaning tasks.
- EO 8.09.03 CLEAN the exterior of the equipment.
- EO 8.09.04 CLEAN the interior of the equipment.

REFERENCES: Introduction to RADAR Systems, Skolnik

NAVEDTRA 172-11-00-87 NEETS Module 11

NAVEDTRA 172-18-00-84 NEETS Module 18

NAVSEA 0967-LP-195-9010 RADAR System Fundamentals

AN/SPS-69 Technical Manual RMC#G261404 Rev A.

- TPO 8.01 Given a RADAR system and a Technical manual, PERFORM a system functional check.
- EO 8.01.01 CONNECT the system for operation.
- EO 8.01.02 VERIFY front panel control operation.
- EO 8.01.03 VERIFY display screen sensitivity, sweep length, sweep linearity, centering, range rings and illumination.
- TPO 8.02 Given a RADAR system, a technical manual, and tools, VERIFY the system is Ready for issue.
- EO 8.02.01 VERIFY input voltages.
- EO 8.02.02 VERIFY AVR output voltages using safety procedures for measuring in excess of 300 volts.
- EO 8.02.03 VERIFY magnatron current.
- EO 8.02.04 VERIFY modulator pulse width and Pulse Repetition Frequency.
- EO 8.02.05 VERIFY display monitor operation.
- TPO 8.03 Given a RADAR system, a technical manual, and tools, ADJUST the system to performance specifications.
- EO 8.03.01 ADJUST the display unit AVR.
- EO 8.03.02 ADJUST the display monitor.
- EO 8.03.03 ADJUST the indicator preset.
- EO 8.03.04 ADJUST the scanner unit AVR.
- EO 8.03.05 ADJUST the receiver.
- TPO 8.04 Given a RADAR system,test equipment, tools and replacement parts, RESTORE the failed equipment to performance specifications.
- EO 8.04.01 PERFORM a functional check of the system.
- EO 8.04.02 LOCATE the faulty unit within the system.
- EO 8.04.03 LOCATE the faulty module/board.

Unit Eight Electronic Navigation

Terminal Performance Objectives: TPO's are the final performances required to pass this course. EO's (Enabling Objectives) help you to accomplish the TPO. You must complete all TPO's and EO's.

LORAN-C: This section covers LORAN-C operation, application and the RayNav 750 S/D in particular. All maintenance procedures are IAW equipment technical manuals and MPC's.

REFERENCES: RayNav 750 S/D Loran C Navigator Instruction Manual COMDTINST M16562.6 LORAN C User Handbook NAVEDTRA 172-10-00-83 NEETS Module 10.

TPO's:

TPO 8.07 Given a RayNav-750 S/D Loran-C navigation receiver system, Test equipment and technical manual, VERIFY the operation of the system.

EO 8.07.01 CONNECT the system for operation.

EO 8.07.02 PERFORM an acquisition test.

EO 8.07.03 MEASURE the battery and power supply voltages

EO 8.07.04 TEST SNR, ECD and TCXO.

EO 8.07.05 TEST RayNav 750 S/D remote head.